



How to solve the problem of medical deserts in Europe?

ROUTE-HWF project

Linda Flinterman¹, Ana I. Gonzalez^{2*}, Laura Seils², Sorin Dan³, Robert Likic⁴, Alicja Domagata⁵, Katarzyna Dubas-Jakóbczyk⁵, Ronald Batenburg¹

¹ Netherlands Institute for Health Services Research (NIVEL), Utrecht, The Netherlands; ² Avedis Donabedian Research Institute-UAB, Barcelona, Spain
³ University of Vaasa, Vaasa, Finland; ⁴ University of Zagreb, Zagreb, Croatia; ⁵ Jagiellonian University Medical College, Krakow, Poland

Background:

Medical deserts are increasingly considered a problematic issue for many countries, which try to employ a multitude of policies, actions, and initiatives to achieve a better distribution of the health workforce (HWF).

Aim and objective:

Improve timely access to high-quality healthcare across all EU regions by developing a roadmap to help EU Member States in designing and implementing their own health workforce policies that address medical deserts

Our approach:

Step 1: Our literature review shows that medical deserts are characterized by several elements

Step 2: Our country experts consultations show that 4 elements to define medical deserts are specifically important

Step 3: How can these 4 elements to define medical deserts be measured and monitored between and within countries

Step 4: How can these 4 elements be combined to classify different types of medical, i.e. to create a taxonomy

Step 5: The proof of the taxonomy is in its application

Results from Step 1 & 2

Healthcare demand

1. Percentage of population aged 65 and over
2. Percentage of poverty in the area

Of related importance:

3. Population size of the area
4. Infant mortality rate in the area
5. Mobility of the population in the area
6. Health needs of the population
7. Economic resources in the area

Healthcare supply

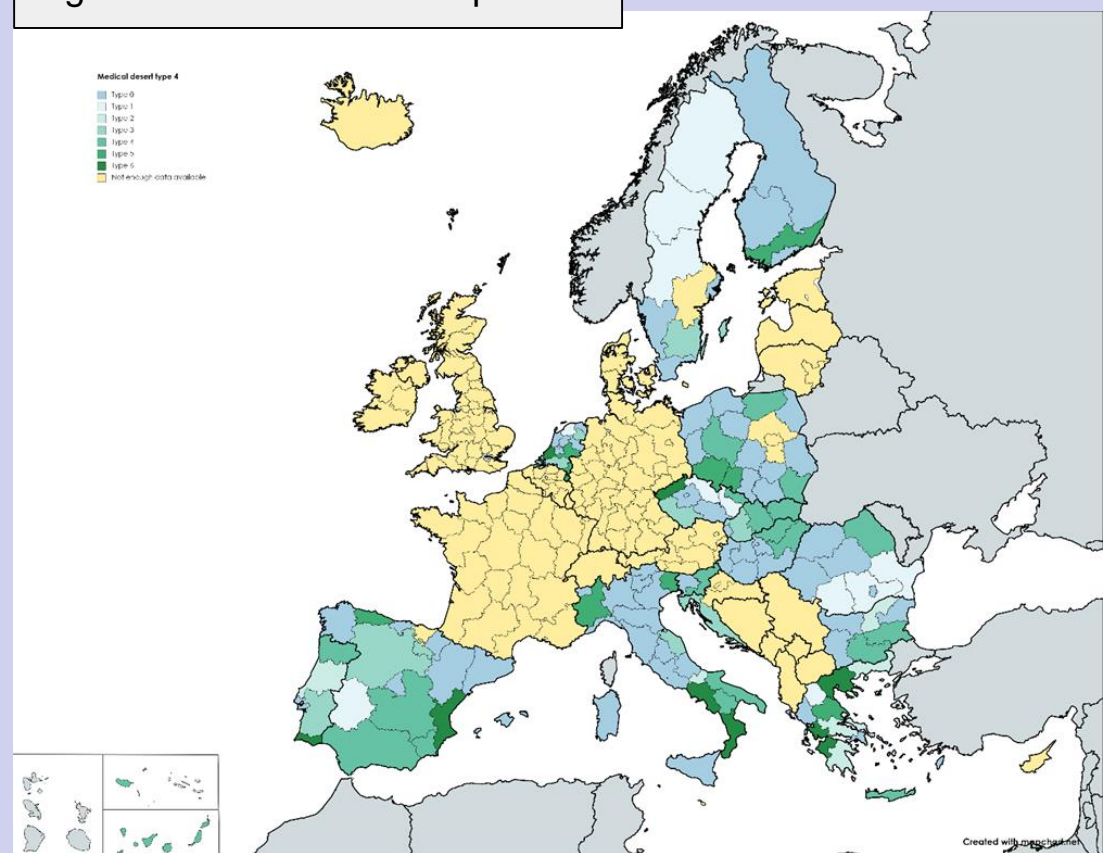
Of key importance:

1. Population to provider ratio
2. Distance/time to facilities

Of related importance:

3. Number of HWF in the area
4. Education and occupation options in the area
5. Presence of health services in the area
6. Distance/adjacent to metropolitan area

Figure 1 - Results from steps 3-5



Step 3 - Application of Eurostat and/or national data at NUTS2 level to measure:

1. The proportion of inhabitants aged 65 and over living in an area, compared to the proportion of all inhabitants in a country living in this area
2. The proportion of inhabitants risk at poverty in an area, compared to the proportion of all inhabitants in a country living in this area
3. Number of health workers per inhabitant of the area
4. The distance or time to a health care facility. This could be by public transport or by car.

Step 4 - Define unique types of medical deserts by a taxonomy:

- Element nr. 4 always needs to be included, as the underservice is the key of all medical desert definitions
- Medical deserts should be defined by at least one element on the demand and one on the supply side
- This results in 5 different and unique types of medical deserts

Step 5

Applying the taxonomy to six case study countries (i) Spain (ii) Netherlands (iii) Croatia (iv) Ireland, (v) Poland (vi) Germany, and scale up to other European to further validate the taxonomies applicability and usability (Figure 1).

Discussion:

Data for measuring the elements of the taxonomy (step 3) might not always be available in every country or might differ in certain aspects. For element 2 (% of poverty in the area) international and regional data might vary regarding the definition of the poverty line or population group. Element 3 (Population to provider ratio) might vary regarding the type of healthcare professional considered. Element 4 (Distance/time to facilities) can vary in respect of the type of transport used, if distance or travel time is measured and what kind of healthcare facility is considered. Combinations of international, national and regional data sources are needed to compare of medical deserts across different countries.

Conclusion:

There is not only one definition of medical deserts, but there are several different types of medical deserts that have emerged from different types of developments. All of them dealing with different types of healthcare provision and coverage problems. Hence they require different types of policy solutions ('routes') to reduce/mitigate desertification.



SCAN ME

Please, let us know about the medical desert situation in your country

